

Amendment and Claim Listing

Please amend claim 1 as follows:

Claim 1 (currently amended) 1. A curing light comprising:
a housing for housing components of a curing light,
air space within said housing,
at least one vent located on said housing,
a secondary heat sink located within said housing, said heat sink having a proximal and
a distal side,
a thermoelectric cooler to assist in heat dissipation located on said secondary heat sink
proximal side,
a fan located within said housing, said fan being capable of causing air to move past
said thermoelectric cooler in order to improve heat dissipation,
a plurality of light emitting semiconductor modules located on said heat sink distal side,
each of said semiconductor modules including
a primary heat sink,
a semiconductor chip which emits light of a wavelength useful for curing light
curable composite materials, said chip being affixed to said primary heat sink,
a cover serving to protect said chip,
a reflective light collecting reflective device which collects light emitted by said
semiconductor modules and directs it as an unfocused beam toward a focusing lens, focuses it
~~into a light beam,~~
a focusing lens which serves to focus said unfocused light beam from said light reflective
device onto a light transport device, and
a light transport device for transporting said focused light beam to a curing location.

Claim 2 (original) 2. A curing light as recited in claim 1 wherein said light

transport device is selected from the group consisting of a plastic stack, a fiber bundle and a light guide.

Claim 3 (original) 3. A curing light as recited in claim 1 wherein said semiconductor chip is selected from the group consisting of light emitting diode chips, laser chips, light emitting diode chip array, diode laser chips, diode laser chip arrays, surface emitting laser chips, edge emitting laser chips, and VCSEL chips.

Claim 4 (original) 4. A curing light as recited in claim 1 wherein said light reflective device has a light reflective interior surface.

Claim 5 (original) 5. A curing light as recited in claim 4 wherein said light reflective interior surface includes a material selected from the group consisting of Al, Au, Ag, Zn, Cu, Pt, chrome, other metals, plating, and plastic.

Please amend claim 6 as follows:

Claim 6 (currently amended) 6. A curing light comprising:
a housing for housing components of a curing light,
a heat sink located within said housing, said heat sink having a proximal and a distal side,
a thermoelectric cooler to assist in heat dissipation located on said secondary heat sink proximal side,
a fan located within said housing, said fan being capable of causing air to move past said thermoelectric cooler in order to improve heat dissipation,
at least one semiconductor chip which can emit light of a wavelength useful for curing light curable composite materials,
said heat sink and said thermoelectric cooler serving to dissipate heat produced by said chip,
a reflective light ~~reflective~~ collecting device which collects light emitted by said chip and

presents it as an unfocused light beam, ~~focuses it into a light beam,~~

a focusing lens which serves to focus said unfocused light beam from said light reflective device onto a light transport device as a focused light beam, and

a light transport device for transporting said focused light beam to a curing location.

Claim 7 (original) 7. A curing light as recited in claim 6 wherein said light transport device is selected from the group consisting of a plastic stack, a fiber bundle and a light guide.

Claim 8 (original) 8. A curing light as recited in claim 6 wherein said semiconductor chip is selected from the group consisting of light emitting diode chips, laser chips, light emitting diode chip array, diode laser chips, diode laser chip arrays, surface emitting laser chips, edge emitting laser chips, and VCSEL chips.

Claim 9 (original) 9. A curing light as recited in claim 6 wherein said light reflective device has a light reflective interior surface.

Claim 10 (original) 10. A curing light as recited in claim 9 wherein said light reflective interior surface includes a material selected from the group consisting of Al, Au, Ag, Zn, Cu, Pt, chrome, other metals, plating, and plastic.

Please amend claim 11 as follows:

Claim 11 (currently amended) 11. A curing light comprising:
a housing for housing components of a curing light,
a heat sink located within said housing, said heat sink having a proximal and a distal side,
at least one semiconductor chip which can emit light of a wavelength useful for curing light curable composite materials,
said heat sink serving to dissipate heat produced by said chip,
a reflective light ~~reflective~~ collecting device which collects light emitted by said chip and

provides it as a beam to a focusing lens, focuses it into a light beam,

a focusing lens which serves to focus said light beam from said light reflective device onto a light transport device, and

a light transport device to transport said focused light beam to a curing location.

Claim 12 (original) 12. A curing light as recited in claim 11 wherein said light transport device is selected from the group consisting of a plastic stack, a fiber bundle and a light guide.

Claim 13 (original) 13. A curing light as recited in claim 11 wherein said semiconductor chip is selected from the group consisting of light emitting diode chips, laser chips, light emitting diode chip array, diode laser chips, diode laser chip arrays, surface emitting laser chips, edge emitting laser chips, and VCSEL chips.

Claim 14 (original) 14. A curing light as recited in claim 11 wherein said light reflective device has a light reflective interior surface.

Claim 15 (original) 15. A curing light as recited in claim 14 wherein said light reflective interior surface includes a material selected from the group consisting of Al, Au, Ag, Zn, Cu, Pt, chrome, other metals, plating, and plastic.

Please amend claim 16 as follows:

Claim 16 (currently amended) 16. A curing light comprising:
a housing for housing components of a curing light,
a heat sink located within said housing, said heat sink having a proximal and a distal side,
at least one semiconductor chip which can emit light of a wavelength useful for curing light curable composite materials,
said heat sink serving to dissipate heat produced by said chip,

a reflective light collecting reflective device which collects light emitted by said chip and groups it as and focuses it into a an unfocused light beam, and

a focusing lens which receives said light beam from said light reflective device and
serves to focus said light beam from said light reflective device onto a light transport device, and
a light transport device for transporting said focused light beam to a curing location.

Claim 17 (original) 17. A curing light as recited in claim 16 wherein said light transport device is selected from the group consisting of a plastic stack, a fiber bundle and a light guide.

Claim 18 (original) 18. A curing light as recited in claim 16 wherein said semiconductor chip is selected from the group consisting of light emitting diode chips, laser chips, light emitting diode chip array, diode laser chips, diode laser chip arrays, surface emitting laser chips, edge emitting laser chips, and VCSEL chips.

Claim 19 (original) 19. A curing light as recited in claim 16 wherein said light reflective device has a light reflective interior surface.

Claim 20 (original) 20. A curing light as recited in claim 19 wherein said light reflective interior surface includes a material selected from the group consisting of Al, Au, Ag, Zn, Cu, Pt, chrome, other metals, plating, and plastic.